

Particle creation by a black hole as a consequence of the Casimir effect

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Abstract

The programme of reduction of black-hole evaporation to quantum-field effects in flat space-time is carried out. The consideration of the potential-barrier finite conductivity enables to eliminate the pathology of vacuum stress-tensor on the horizon and to reveal that the black-body radiation should be created in the whole region $[3 M, \infty]$. © 1984 Società Italiana di Fisica.

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Keywords

PACS. 03.65., quantum mechanics, Quantum theory